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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/865,404	05/25/2001	Marc F. Hamel	M0627/7018 (LMG)	4280
23628	7590	03/11/2005	EXAMINER	
WOLF GREENFIELD & SACKS, PC FEDERAL RESERVE PLAZA 600 ATLANTIC AVENUE BOSTON, MA 02210-2211			GORDON, BRIAN R	
			ART UNIT	PAPER NUMBER
			1743	

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/865,404

Applicant(s)

HAMEL ET AL.

Examiner

Brian R. Gordon

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7-14-04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-12, 39-41, 61-68, 73-76 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12, 39-41 and 66-68 is/are allowed.
- 6) ☒ Claim(s) 61-65 and 73-76 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see remarks, filed July 19, 2004, with respect to the rejection(s) of claim(s) 2, 4-12, 39 and 61 have been fully considered and are persuasive. Therefore, the rejections have been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Gubernator et al. US 6,436,351.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

3. The amendment filed July 14, 2004 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure (and previous amendment which introduced claim 65). 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The specification does not provide support for the clamp 574 comprising slideways 608 and 614. The slideways are disposed in the block 510 (applicant's specification pages 19-20; figures 16, 16A).

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 65 and 76 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not provide support for the clamp 574 comprising slideways 608 and 614. The slideways are disposed in the block 510 (applicant's specification pages 19-20; figures 16, 16A). Previously added claim 65 and new claim 76 are directed to the material the examiner considers new matter which was not in the original specification and claims.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 61-64 and 73-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yahiro US 6,182,719 further in view of Gubernator et al. US 6,436,351.

Yahiro discloses a distribution apparatus for distributing liquid samples using distribution tips, which distribution tips are held in a tip rack placed in a feeder section and fitted relative to a distribution head. The distribution apparatus has a fitting stage, provided in a space between the feeder section and a distribution stage, for supporting the tip rack and fitting the distribution tips. A distribution tip alignment device is provided in the fitting stage, which aligns dislocated distribution tips at the bottom ends to a correct formation by making contact with the side wall surfaces of the distribution tips. The tip ends of the distribution tips, which are attached to nozzles of the distribution head, are aligned by the distribution tip alignment device at a certain specific pitch, at the time when the distribution tips are attached to the nozzles, or after they are attached to the nozzles. By so doing, a liquid sample can be distributed to small diameter wells

without having a dislocation problem.

A transfer table 31 is horizontally supported by pillars 30 standing on the base plate 2. A Z axis table 33 is provided on the transfer table 31 and is equipped with a Z axis motor 34. A distribution head 20 (dispensing head) is installed on the Z axis table 33 (means for retaining dispensing head). The distribution head 20 can move horizontally by operation of the motor 32 on the transfer table 31 such that a range of the movement covers the fitting stage 6, the distribution stage 3 and a discard box 36 provided at a side of the machine bed 1. The distribution head 20 moves vertically by operation of the Z axis motor 34 on the regions of fitting stage 6 and distribution stage 3.

The distribution tip 8 (plurality of disposable tips) is attached to the distribution nozzle by lowering the distribution head 20 towards the tip rack 7. At a side of the fitting stage 6 is a feeder section 9 of the tip rack 7. The feeder section 9 includes a Z axis table 11 installed vertically on a platform, and the level of the platform is located a step lower than the base plate 2 on the machine bed 1. The Z axis table 11 shifts an elevator table 10 up and down while carrying a stack of tip racks 7 (removably mounted tip tray).

The feeder section 9 stores a certain number of tip racks 7 stacked on the elevator table 10. A motor 12 of the Z axis table 11 moves the elevator table 10 up and down so as to raise an uppermost tip rack 7 to the same level as that of the tip rack 7 being placed on the fitting stage 6 (column 3, lines 8-21).

The distribution head 20 is described with reference to FIG. 2. As shown in FIG. 2, an "L" shaped block 21 is engaged via a plate 35 with the Z axis table 33 (housing). The "L" shaped block 21 is provided with a pair of guide rails 23 vertically disposed on

the vertical surface 21a. A slider 24 that is freely slidable with respect to the guide rail 23 is connected with a block 25. The block 25 is equipped with a plurality of plungers 26 arranged in a lattice form. The plungers 26 (plurality of pistons in plurality of chambers) are engaged with a plurality of nozzles 27, which have been provided in a horizontal plane 21b of the "L" shaped block 21 with the same arrangement as that of the plunger 26.

Yahiro does not specify the tips are attached without allowing the nozzles to extend into the pipette tips.

Gubernator et al. discloses provides a system 15 comprising a support rack 16, having an array of reaction wells 18. The system 15 includes a reactor cap assembly 19 with an array of reactor caps 20 (tips) extending into wells 18. A porous gas distribution plate 22, having an array of holes 23 passing therethrough, is captured between support rack 16 and a gasket 24 (flexible seal extending around each chamber). System 15 further comprises a top cover 26, used to retain all of the system components together, having a plurality of holes 27 passing therethrough. Retaining clips 28, which are preferably formed integral with top cover 26, extend downwardly to matingly interlock with notches 21 in the side of support rack 16, thereby holding the system together, as is seen in FIGS. 2, 3A and 3B. The present design provides a sealed reaction environment for each of the reaction wells 18 and eliminates the problems of spillage, leakage, evaporation loss, airborne contamination of well contents, and inter-well cross-contamination of liquid samples as will be explained.

It would have been obvious to one of ordinary skill in the art at the time of the invention to recognize that the attachment configuration (clamps) may be employed to provide a leak-proof attachment of the tips to the dispense head of Yahiro.

Allowable Subject Matter

8. Claims 2-12, 39-41, and 66-68 are allowed
9. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not teach nor fairly suggest a device the comprises the slideways disposed on the housing for supporting the dispensing head and extending in a second direction generally perpendicular to the first direction, said dispensing head being unattached to the slideways to allow said dispensing head to be slidable into and out of the housing along the slideways in said second direction, a retaining means comprising a plurality of threaded shafts mounted to the dispensing head; a plate disposed within the housing; cutouts on the plate for receiving the threaded shafts; and a knob threadably mounted on each threaded shaft, said knobs being rotatable about the shaft to be screwed into engagement with said plate for securing said dispensing head to the plate.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The websites of PerkinElmer, Biomek NX Laboratory, and Tomec disclose automated dispensing devices.
4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is 571-272-1258. The examiner can normally be reached on M-F, with 2nd and 4th F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

brg


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